REVISED DETERMINATIONS OF THREE OF THE NATUNA RODENTS

By OLDFIELD THOMAS.

SINCE the paper on the Mammals of the Natuna Islands by Mr. Hartert and myself* was published I have been put in a better position to correctly identify certain of the species there mentioned, partly by the receipt of further material from neighbouring localities, and partly by having been able in the meantime to completely revise the Bornean *Muridae* in the British Museum collection.

The following corrections in the Natuna list prove to be necessary :—

No. 23, p. 658, **Mus hellwaldi** Jent.,

should be **Mus rajah** Thos.,† a species of which, besides those from the Natunas, a considerable number of specimens are in the Museum collection from Borneo, Palawan, Labuan, etc. They differ from the real *M. hellwaldi* of Celebes by being all exceedingly spiny, a character which, however variable elsewhere, is evidently in this case one of sufficient constancy to be looked upon as specific.

No. 29, p. 659, **Sciurus lowi** Thos. (not Gray).

The Natuna representative of *S. lowi* appears to be sufficiently different to deserve a subspecific name. The specimen in the British Museum has now been skinned out of spirit, and had its skull prepared. Unfortunately there was and is still a doubt as to whether its colour has not been reddened by the spirit, as seems to have happened with some of the other specimens sent home by Mr. Everett. Certain yellows appear to have been turned into red, while other colours have remained unaffected.

The skull of the present animal shows precisely the peculiar long muzzle of that of *S. lowi*, and agrees in nearly all respects, but is decidedly smaller, and the postorbital processes are longer and slenderer.

Externally the Natuna squirrel is distinguished by its smaller size, shorter feet, and also by its longer ear, which in the typical variety is a mere low rim, while the Natuna subspecies has a distinct upstanding conch.

Should the colour be the natural one, it may be defined as grizzled rufous instead of olive; the under surface white, with a strong rufous wash, especially in the genital region; anteorbital spots rufous instead of yellow; no black patch behind ear.

This small form might be called *S. lowi natunensis*.

Dimensions of an adult *male* in skin: Head and body, 152 mm.; tail, 87: hind-foot, 31·8. Ear: from notch, 12; above crown, 6. Skull: greatest length, 36·5; basal length, 31·3; greatest breadth, 22. Nasals: length, 10·7; interorbital breadth,

* *Nov. Zool.*, i., p. 652 (1894).

† *Ann. Mag. N. H.* (6), xiv., pp. 451 and 454 (1894).

11·5; tip to tip of postorbital processes, 17·7. Palate: length from henselion, 18·2: diastema, 9·2; upper molar series (exclusive of p^3), 6·2.

Hab. Sirhassen Island, Natunas (September 23rd, 1893).

No. 33, p. 660, **Sciuropterus phayrei** Blyth (?).

Further material representing the true *S. phayrei* shows, as we suggested, that the Natuna species is new. It might be called

Sciuropterus everetti sp. nov.

Size about as in *S. phayrei*. General colour of upper surface rich rufous; the head, nape, and back all one uniform hue: the blackish slaty bases of the hairs not or scarcely showing through. Whiskers as usual; no supplementary malar or supraorbital bristles. Eyes surrounded by a narrow brownish ring. Ears short, narrow, thinly haired, blackish brown. Behind them, on the sides of the neck, there is a large whitish patch, behind which again the general rufous tone is at its richest. On the dorsal surface laterally the red hair tips hide the slaty black less and less, so that the upper surface of the parachute gradually becomes quite black; the extreme edge is, however, white. Under surface mixed slate, white, and rufous; the hairs of the throat and chest pure white to their bases, the others—of body, inner sides of limbs, and under surface of parachute—slaty grey proximally, white or pale rufous terminally. Outer sides of limbs blackish, like the upper side of the parachute. Soles hairy under the heels and along their outer edge, the naked part with one large proximal and four distal pads. Tail, as usual, markedly distichous: its proximal half-inch bright rufous all round, the remainder dark brown above and below, but on the sides, forming a middle layer, the long hairs are bright orange rufous from the terminal half of the tail, fading gradually into the brown of the tip.

In younger specimens the rufous colour is less developed throughout, so that the general colour takes its tone mainly from the slaty bases to the hairs.

Skull with a short muzzle, short and rather feeble postorbital processes, and with the petrosal part of the bullae much swollen postero-superiorly, so that the upper inflation projects behind some way beyond the paroccipital processes.

Molars with the essential structure of those of *S. alboniger*, *phayrei*, *spadiceus*, etc., widely different from those of *S. horsfieldi*. A distinct p^3 present.

Dimensions of the type, an adult *female*, measured when in spirit, before being skinned:—Head and body, 161 mm.; tail, 140; hind-foot, 29; ear, 20 by 11. Skull: greatest length, 38·5; basal length, 33·5; greatest breadth, 24·3. Nasals: length, 10·8; interorbital breadth, 9; tip to tip of postorbital processes, 15·6; greatest breadth posteriorly, 19·4. Palate: length from henselion, 17·5; diastema (to anterior root of p^4), 9·4; length of upper molar series (exclusive of p^3), 7·3; lower jaw, condyle to incisor tip, 26·5; coronoid to angle, 15.

Hab. Bunguran Island. Three specimens found together in a hole in a tree, October 6th, 1893.

Type. Brit. Mus., No. 94.9.28.12. *Paratype* in the Tring Museum.

S. phayrei Blyth, in the absence of authentic specimens of which we dared not previously describe this animal, is now, thanks to the kindness of the authorities of the Calcutta Museum, represented in the British Museum by a skin from Pegu which had been compared with the actual types at Calcutta. This skin, and another quite

agreeing with it from the Laos Mts. (Coll. Mouhot),* show that *S. phayrei* is but little more than a dwarf form of *S. alboniger*, although it is no doubt just specifically distinct. The really nearest ally of *S. everetti* is probably *S. aurantiacus* Wagn.,† of which Jentink ‡ has figured the skull of a topotype. Judging by this figure, *S. everetti* shares the general form of the skull and the postero-superiorly expanded bullae, but is decidedly larger, and has stouter and more directly transverse postorbital processes. Nor does the coloration of the tail agree with Wagner's description.

The two animals formerly described as new both belonging to genera in which species had already been named after Mr. Everett, Mr. Hartert and I were unable to signify in this way our recognition of the signal services to science rendered by his exploration of the zoologically unknown Natunas. It is therefore with great pleasure that I now dedicate this beautiful Natuna squirrel in his honour.

* Referred to by Anderson, *Zool. Yunn. Exp., Mamm.*, p. 298.
† *Schreb. Säug., Supp.* iii., p. 225 (1843). From Banka.
‡ *N. L. M.*, xii., p. 150, Pl. vii. (1890).

ON A NEW SPECIES OF THE FAMILY OF *SPHINGIDAE*.

By THE HON. WALTER ROTHSCHILD.

Cypa perversa sp. nov.

Male.—*Upperside: forewings* olive orange, vermiculated with greyish dots, and crossed transversely by four broad irregular chocolate bands. The two central bands are joined in the centre by a broad short longitudinal bar, and the outer submarginal band has in it a row of four orange spots, and a very large white patch extends from near the anal angle right across the band.

Hindwings brownish red or cinnamon rufous, crossed transversely near the margin by an indistinct blackish line.

Body dull orange, splashed and shaded with chocolate.

Underside: forewings cinnamon rufous, with a blackish stigma in cell and a broad outer border of dull orange vermiculated with grey and brown; from the apex to within the angle of inner margin runs an oblique brown line.

Hindwings dull yellowish orange, vermiculated and spotted with pale brown.

Female.—In Novitates Zoologicae, I., p. 70, Pl. VII., fig. 6 (1894), I described as the *female* of my Bornean *Cypa oliracea* a Sikkim specimen from the Felder collection. This turns out the true *female* of this new one, and not the *female* of *C. oliracea*.

Expanse: ♂, 2·5 inches = 64 mm.

Hab. Khasia Hills.
